## **Built Up Roofing Design Requirements**

- 1- Type III (3) asphalt should be used at a minimum. Type IV (4) asphalt should be used if slope is greater than <sup>1</sup>/<sub>4</sub>".
- 2- Low furning asphalt should be used.
- 3- Cold process B.U.R. is acceptable and preferred on sites that smell is a concern.
- 4- Minimum of type VI (6) felts and a 4-ply system should be used.
- 5- Minimum #4 lb lead is required for all drains and any other location lead is used for flashing material.
- 6- Aggregate should meet requirements of ASTM D 1863, 3/8" or 9mm nominal. SBS modified FR cap sheet with granules is also acceptable as surfacing.
- 7- No EPS insulation will be allowed in any B.U.R. system.
- 8- Minimum Warranty period should be 20 years on appropriate DFCM roofing Warranty.
- 9- Minimum Contractor workmanship Warranty period should be 5 years on DFCM contractor Warranty.
- 10- A DFCM history record is required on all roofing systems.
- 11- Roof slope of ¼" is required on all roof systems. Slope should be built into structure on new buildings and added with insulation on re-roof applications. Insulation should always be installed in two layers minimum unless a recovery board is all that is required.
- 12- Minimum flashing height requirements are 8" for all mechanical, skylights, wall flashings or any other item that extends above the roof line. This is a minimum flashing height, windows or other such items should be well above 8"above the roof line.
- 13- All mechanical equipment is required to be set on roof deck. No equipment should sit on insulation.
- 14- Standing seam joints are required on all copings. All cap metal should be attached with a continuous clip on the front side and fasteners 16" minimum on back side.
- 15- No concrete walkway pads are allowed on roof system.
- 16- All metal (copings, counter flashings and edge metal) associated with roof system should be a minimum of 24 gauge and color clad.
- 17- All material and details should meet the requirements of NRCA, SMACNA, UL and FM.
- 18- The DFCM Roofing program manager should review and approve any variance from that listed above.